

Product Index—Transmission and Distribution Environmental Issues

To maintain safe and reliable grid operation, power companies must minimize environmental impacts from power delivery systems and manage the risk those systems may pose to the health of humans and other species. These challenges are magnified by an expanding and aging electric transmission and distribution (T&D) infrastructure, and new rights-of-way (ROW) standards.

The Electric Power Research Institute's Transmission and Distribution Environmental Issues program (P51) helps power companies meet these challenges by conducting research on substation environmental issues, utility pole assessment and impact, avian and animal interactions with powerlines and substation equipment, vegetation management (VM) and inspection techniques, remote sensing and new technologies for environmental applications, transmission siting, construction, and maintenance environmental issues; and emerging contaminants and PCB mitigation and remediation.

Quick access to a library of relevant results from the program is available here.

To select a specific research area, click on an entry in the topical index at right.

To view the abstract of a publication, click on the publication number or go to

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Biodegradability of Pentachlorophenol in the Environment: A Literature Review	★	TR-102172	1993
Creosote-Treated Wood Poles and Crossarms: Toxicity Characteristic Leaching Procedure (TCLP) Results	★	TR-100870	1992
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Conductor Cover Selection: An Animal Outage Device Selection Process to Maximize Installation Ease, System Compatibility, and Overall Performance	★ 3002006333	2016
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Bird Strike Indicator/Bird Activity Monitor and Field Assessment of Avian Fatalities: Project Update – March 2004	★ 1005551	2004
Bat Interactions with Wind Turbines at the Buffalo Ridge, Minnesota Wind Resource Area: An Assessment of Bat Activity, Species Composition and Collision Mortality	★ 1009178	2003
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Plant Community Development on Electric Transmission Line Rights-of-Way with/without Attention to Controlling Invasive Exotic Plants: A Long-Term Collaborative Research Project with FirstEnergy on the Cuyahoga Valley National Park	★	3002004307	2014
Transmission Right-of-Way Steward Pilot Audit Report—New York Power Authority		3002004308	2014
Inspection Technology for Vegetation Management: Overview of GeoDigital International LiDAR Inspection Approach	★	3002003573	2014
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Management of Riparian Areas on Electric Transmission Line Rights-of-Way	★	1021826	2011

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Vegetation Management in Electric Transmission Rights-of-Way and Potential Impacts on Groundwater	★	1020323	2010
SUSTAINABILITY: A Central Principle for the Electric Utility Industry Available Through Vegetation Management on Transmission Rights-of-Way	★	1017963	2009
Utility Vegetation Management: Use of Reliability-Centered Maintenance Concepts to Improve Performance	★	1019417	2009
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Electric Transmission Right-of-Way Post-Blackout Vegetation Management Strategies	★	1012551	2007
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Product Options for Herbicide Application	★	1010125	2005
Automatic Vehicle Locating and Its Use for Electric Utility Vegetation Management	★	1010124	2005
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Wildlife and Integrated Vegetation Management on Electric Transmission Line Rights-of-Way	★	1005366	2002
Rights-of-Way Mechanical Cutting and Disposal Costs – Update 2001	★	1005186	2001
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Tree Growth Regulators for Management of Trees in Electric Utility Rights-of-Way: A Literature and Current Application Status Review	★	1000317	2000
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Natural Growth Inhibitors (Allelopathy): Literature Review	★	1000268	2000
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Vegetation Dynamics Along Utility Rights-of-Way Factors Affecting the Ability of Shrub and Herbaceous Communities to Resist Invasion by Trees	★	TR-113377	1999
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